

GENERAL REMARKS

In response to Office Action (OA), mailed on 05/04/2005, applicant amends the claims.
Complete listing of all claims with markings showing current changes is given on pages 3 to 6.
Page 7 contains detailed remarks.
Pages 8 has closing statements.

DETAILED REMARKS

Office Action (OA), mailed on 05/04/2005, rejected claims 1 - 23 under 35 U.S.C. 103(a) as being unpatentable over Maagdenberg (US 3,843,398) in view of Matsudaira et al. (4,870,322).

Applicant amended claim 1 to more specifically identify the full scope and breadth of the invention. To recap, the invention teaches the growth of an oxynitride layer for gate dielectric on a Ge based material wafer by applying a two step method. In the first step of the method only N is incorporated into the Ge based material, and then, following the N incorporation, oxidation takes place in the second step. Applicant respectfully suggests that the amended claim 1 is not rendered obvious in view of Maagdenberg and Matsudaira. Maagdenberg teaches one step N/O deposition on Si. It emphasizes that the main aim of their invention (US 3,843,398), is to avoid the use ammonia (NH₃). The present invention in its first step precisely prefers ammonia, and deals with Ge. Although Maagdenberg makes sweeping statements about use of their method for all semiconductors, there is absolutely no teaching regarding Ge. In the same manner, Matsudaira teaches nothing of a two step process, and does not grow oxynitride on a Ge based material. There is no hint or suggestion in either cited prior art, or in their combination, that microelectronics quality oxynitride layers on Ge based materials can be achieved by the two step process; where the incorporated N of the first step controls the growth of the oxide in the second step.

Independent claim 21 was amended in a similar manner as claim 1.

Where needed, applicant amended the dependent claims to conform with amended independent claims 1 and 21. If independent claim 1 and 21 are now patentable, then the dependent claims by including further limitations are a fortiori patentable.


Furukawa (US 6,596,597) made of record, is mute on the two step method of the present invention, as well.

Claims 24 - 30 are being cancelled as per election on 02/19/2005.

CLOSING STATEMENTS

Applicant respectfully submits that as expressed in this amendment the claims now put forward only patentable subject matter. Applicant further submits that this application is now in condition for allowance, which action is respectfully requested.

Respectfully,



George Sai-Halasz, PhD
Registration # 45,430

145 Fernwood Drive
E. Greenwich, RI 02818.
401-885-8032 (Fax 401-885-1046)
E-MAIL - patents@computer.org

Cust. No.: **24299**